

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a Part 70 Significant Source and
Significant Permit Modification**

Source Description and Location

Source Name:	MGPI of Indiana, LLC
Source Location:	7 Ridge Avenue, Lawrenceburg, IN 47025
County:	Dearborn
SIC Code:	2085
Operation Permit No.:	T 029-32119-00005
Operation Permit Issuance Date:	June 20, 2014
Significant Source Modification No.:	029-35496-00005
Significant Permit Modification No.:	029-35505-00005
Permit Reviewer:	Kristen Willoughby

Source Definition

Proximo Distillers Indiana, LLC owns a bottling plant (source ID # 029-00043) that was previously part of the same permit as the MGPI of Indiana, LLC distillery (source ID #029-00005). Some of the MGPI plant's production is bottled at the Proximo plant. IDEM, OAQ has examined whether these two plants are part of the same major source. The term "major source" is defined at 326 IAC 2-7-1(22). In order for these plants to be considered one major source, they must meet all three of the following criteria:

- (1) the plants must be under common ownership or common control;
- (2) the plants must have the same two-digit Standard Industrial Classification (SIC) Code or one must serve as a support facility for the other; and,
- (3) the plants must be located on contiguous or adjacent properties.

The plants have separate ownership. MGPI of Indiana, LLC and Proximo Distillers Indiana, LLC are distinct corporations. There are no common controllers, common corporate officers or common directors between the two companies. The corporations are not subsidiaries of any common corporate parent or other common owner. Therefore no common ownership exists.

Where there is no common ownership, IDEM's Nonrule Policy Document Air-005 sets out two independent tests to determine if common control exists. The first test, the auxiliary activity test, determines whether one source performs an auxiliary activity which directly serves the purpose of the primary activity and whether the owner or operator of the primary activity has a major role in the day-to-day operations of the auxiliary activity. An auxiliary activity directly serves the purpose of a primary activity by supplying a necessary raw material to the primary activity or performing an integral part of the production process for the primary activity.

Day-to-day control of the auxiliary activity by the primary activity may be evidenced by several factors, including:

- is a majority of the output of the auxiliary activity provided to the primary activity?
- can the auxiliary activity contract to provide its products/services to a third-party without the consent of the primary activity?

- can the primary activity assume control of the auxiliary activity under certain circumstances?
- is the auxiliary activity required to complete periodic reports to the primary activity?

If one or a combination of these questions is answered affirmatively, common control may exist.

The MGPI plant sends about 10% of its output to the Proximo plant for bottling. A pipeline from the MGPI plant sends the alcohol directly to the Proximo plant. The remainder of the MGPI plant's production is shipped out as bulk spirits. The Proximo plant is free to bottle spirits from other distilleries. The MGPI plant has no ability to assume control of the Proximo plant under any circumstances. The Proximo plant is not required to complete periodic reports to the MGPI plant. The Proximo plant does not send any output to the MGPI plant. More than 50% of the Proximo plant's bottling is done from alcohol it receives from other distilleries. The plants do not meet the first common control test.

The second common control test in the nonrule policy is the but/for test. This test focuses on whether the auxiliary activity would exist absent the needs of the primary activity. If all or a majority of the output of the auxiliary activity is consumed by the primary activity the but/for test is satisfied. Only 10% of the MGPI plant's output is bottled at the Proximo plant. Of all the bottling done at the Proximo plant, less than 50% is done from alcohol received from the MGPI plant. Therefore the second common control test is also not met. IDEM finds that the MGPI plant and the Proximo plant are not under common control. Since neither common ownership nor common control exists, the first part of the definition of major source is not met.

The Standard Industrial Classification Code Manual of 1987 sets out how to determine the proper SIC Code for each type of business. More information about SIC Codes is available at http://www.osha.gov/pls/imis/sic_manual.html on the Internet. The SIC Code is determined by looking at the principal product or activity of each plant. The MGPI plant has the two-digit SIC Code 20 for the Major Group Food and Kindred Products, which includes the four-digit SIC Code 2085 for Distilled and Blended Liquors. The Proximo plant has the two-digit SIC Code 51 for the Major Group Wholesale Trade – Nondurable Goods. The Proximo plant has the four-digit SIC Code 5182 Wine and Distilled Alcoholic Beverages, which includes plants that bottle alcohol.

A plant is a support facility to another plant if it dedicates 50% or more of its output to the other plant. The MGPI plant sends about 10% of its output to the Proximo plant. The Proximo plant sends nothing to the MGPI plant. The Proximo plant does less than 50% of its bottling work using alcohol received from the MGPI plant. Since neither plant dedicates 50% or more of its output to the other plant, there is no support facility relationship. Since the plants do not have the same two-digit SIC Code or a support relationship, the second part of the major source definition is not met.

The last part of the definition is whether the plants are on contiguous or adjacent properties. The plants are located on contiguous properties that are separated only by a right-of-way for an Indiana state highway. The property boundaries of the plants share a common border under the right-of-way. Since the plants are located on contiguous properties, they meet the third element of the major source definition.

IDEM, OAQ finds that the MGPI plant and the Proximo plant do not meet all three parts of the major source definition and therefore the two plants are not part of the same major source.

Existing Approvals

The source was issued Part 70 Operating Permit No. T029-32119-00005 on June 20, 2014. There have been no subsequent approvals issued.

County Attainment Status

The source is located in Dearborn County.

Pollutant	Designation
SO ₂	Cannot be classified.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Nonattainment effective July 20, 2012, for the 2008 8-hour ozone standard for Lawrenceburg Township. Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard for the remainder of the county. ¹
PM _{2.5}	Attainment effective December 23, 2011, for the annual PM _{2.5} standard for Lawrenceburg Township. Unclassifiable or attainment effective April 5, 2005, for the annual PM _{2.5} standard for the remainder of the county.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard.
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.	

- (a) **Ozone Standards**
U.S. EPA, in the Federal Register Notice 77 FR 112 dated June 11, 2012, has designated Dearborn County Lawrenceburg Township as nonattainment for ozone. On August 1, 2012, the air pollution control board issued an emergency rule adopting the U.S. EPA's designation. This rule became effective August 9, 2012. IDEM does not agree with U.S. EPA's designation of nonattainment. IDEM filed a suit against U.S. EPA in the U.S. Court of Appeals for the DC Circuit on July 19, 2012. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's designation. Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Therefore, VOC and NO_x emissions were evaluated pursuant to the requirements of Emission Offset, 326 IAC 2-3.
- (b) **PM_{2.5}**
Dearborn County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **Other Criteria Pollutants**
Dearborn County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

The proposed source includes boilers which support the distilled spirits production source with a total heat input rating of greater than 250 million British thermal units per hour (MMBtu/hr).

The boilers with a total heat input rating of greater than 250 MMBtu/hr are considered one of the 28 listed source categories, based on the EPA guidance for “nesting activities”. Therefore, any fugitive emissions from these boilers are counted toward PSD applicability.

Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Entire Source	
Pollutant	Emissions (ton/yr)
PM	>250
PM ₁₀	>250
PM _{2.5}	>250
SO ₂	<100
NO _x	>250
VOC	>250
CO	>100
Single HAP	>10
Total HAPs	>25

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant, excluding GHGs, is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is a major stationary source, under Emission Offset (326 IAC 2-3), because VOC, a nonattainment regulated pollutant, is emitted at a rate of 100 tons per year or more.
- (c) These emissions are based upon the Technical Support Document for Title V Operating Permit Renewal No. T029-32119-00005.
- (d) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by MGPI of Indiana, LLC on February 23, 2014, relating to the installation of a new DDG dryer and wet cake storage pad. The application also included modifications to the existing cooler and transport system (EU-32).s The following is a list of the proposed emission units and pollution control device(s):

- (a) One (1) DDG dryer operation, approved in 2015 for construction, identified as EU-39, with emission controlled by four (4) cyclones (CE-39a) and an 8 MMBtu/hr RTO (CE-39b), exhausting to stack S-320, and consisting of the following:
 - (1) One (1) DDG Dryer, with a maximum heat input of 45 MMBtu/hr and a maximum throughput of 9.56 tons/hr DDG.
 - (2) One (1) screw K-valve, identified as Screw #1 K-Valve.
 - (3) Three (3) enclosed feed conveyors, identified as #11 - #13.
 - (4) One (1) agitator mixer and inlet screw.
- (e) One (1) box screw, approved in 2015 for construction, identified as Drop Box Screw. All emissions from this unit are routed to the existing cooler and transport system (EU-32) and controlled by a cyclone, exhausting to Stack S- 310.
- (f) One (1) drag conveyor, approved in 2015 for construction. All emissions from this unit are routed to the existing cooler and transport system (EU-32) and controlled by a cyclone, exhausting to Stack S- 310.
- (g) One (1) recycle screw, approved in 2015 for construction. All emissions from this unit are routed to the existing cooler and transport system (EU-32) and controlled by a cyclone, exhausting to Stack S- 310.
- (h) One (1) K-Valve, approved in 2015 for construction. All emissions from this unit are routed to the existing cooler and transport system (EU-32) and controlled by a cyclone, exhausting to Stack S- 310.
- (i) Three (3) product conveyors, approved in 2015 for construction, identified as #21 - #23. All emissions from these units are routed to the existing cooler and transport system (EU-32) and controlled by a cyclone, exhausting to Stack S- 310.
- (j) One (1) wet cake storage pad, approved in 2015 for construction, identified as EU-40, with a maximum throughput of 24.56 tons per hour wet cake, with emissions uncontrolled.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
S-320	EU-39	125	TBD	30,000	315

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.

Increase in PTE Before Controls of the Modification	
Pollutant	Potential To Emit (ton/yr)
PM	421.32
PM ₁₀	420.19
PM _{2.5}	419.01
SO ₂	18.84
VOC	419.66
CO	464.28
NO _x	27.86
Single HAPs	>10
Total HAPs	>25

This source modification is subject to 326 IAC 2-7-10.5(g), modifications subject to 326 IAC 8-1-6, modifications with a potential to emit greater than 25 tpy of PM, PM₁₀, PM_{2.5}, VOC, and NO_x, modifications with a potential to emit greater than 100 tpy of CO, and modifications with a potential to emit greater than 10 tpy of a single HAP and 25 tpy total HAPs. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because it does require case-by-case emission limitations.

Permit Level Determination – PSD and Emission Offset

The Permittee has provided information as part of the application for this approval that, based on Actual to Projected Actual test in 326 IAC 2-2-2 and 2-3-2, this modification at a major stationary source will not be major for Prevention of Significant Deterioration under 326 IAC 2-2-1 and Emission Offset under 326 IAC 2-3-1. IDEM, OAQ has not reviewed this information and will not be making any determination in this regard as part of this approval. The applicant will be required to keep records and report in accordance with Source obligation in 326 IAC 2-2-8 and Applicability in 326 IAC 2-3-2.

Process / Emission Unit	Project Emissions (ton/yr)						
	PM	PM ₁₀	PM _{2.5} *	SO ₂	NO _x	VOC	CO
<i>PTE (New Units)</i>							
DDG Dryer (EU-39)	8.38	8.38	8.38	18.84	27.86	8.38	46.43
Wet Pad (EU-40)	-	-	-	-	-	0.89	-
Total New Units	8.38	8.38	8.38	18.84	27.86	9.27	46.43
<i>Actual to Potential (DDG Cooler and Transport System EU-32)</i>							
Baseline	0	0	0	-	-	0	-
PTE	7.91	5.01	2.01	-	-	9.16	-
Emissions Increase	7.91	5.01	2.01	-	-	9.16	-
<i>ATPA (Rotary Dryers EU-32)</i>							
Baseline	21.45	21.45	21.45	-	-	635.51	-
Projected Actuals	19.85	19.85	19.85	-	-	587.94	-
Emissions Increase	0.00	0.00	0.00	-	-	0.00	-
Hybrid Test Emissions Increase	16.29	13.38	10.39	18.84	27.86	18.42	46.43
Significant Thresholds - PSD	25	15	10	40	40	NA	100
Significant Thresholds - EO	NA	NA	NA	NA	40	40	NA

*PM_{2.5} listed is direct PM_{2.5}.

The emissions increase for PM_{2.5} is above the applicable Significant threshold. Therefore, netting is triggered for PM_{2.5}.

Net Emissions (ton/yr)	
	PM _{2.5} *
Emissions Increase for Modification (Hybrid Test Emissions Increase from Project Emissions Table above)	10.39
Contemporaneous Increase	0.41
Contemporaneous Decrease	-2.02
Net Emissions Increase for Modification	8.78
PSD Significant Thresholds	10

*PM_{2.5} listed is direct PM_{2.5}.

See calculations for a detailed analysis of the contemporaneous netting.

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases

(GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

This modification to an existing major PSD stationary source is not major because:

- (a) The emissions increase of PSD regulated pollutants PM, PM₁₀, SO₂, NO_x, and CO, are less than the PSD significant thresholds.
- (b) The net emissions increase of the PSD regulated pollutant PM_{2.5} is less than the PSD significant threshold.

Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Since this source is considered a major PSD source and the unrestricted potential to emit of this modification is greater than twenty-five (25) tons of PM per year, fifteen (15) tons of PM₁₀ per year, ten (10) tons of direct PM_{2.5} per year, and one hundred (100) tons of CO per year, this source has elected to limit the potential to emit of this modification as follows:

- (a) The total dryer feed rate for the Rotary Dryers (EU-32) shall not exceed 147,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The PM_{2.5} emissions from the Rotary Dryers (EU-32) shall not exceed 0.27 lb/ton.
- (c) The PM emissions from the Transport System (EU-32) shall not exceed 1.22 lbs/hr.
- (d) The PM₁₀ emissions from the Transport System (EU-32) shall not exceed 0.82 lbs/hr.
- (e) The PM_{2.5} emissions from the Transport System (EU-32) shall not exceed 0.40 lbs/hr.
- (f) The PM emissions from the DDG Dryer Operation (EU-39) shall not exceed 1.91 lbs/hr.
- (g) The PM₁₀ emissions from the DDG Dryer Operation (EU-39) shall not exceed 1.91 lbs/hr.
- (h) The PM_{2.5} emissions from the DDG Dryer Operation (EU-39) shall not exceed 1.91 lbs/hr.
- (i) The CO emissions from the DDG Dryer Operation (EU-39) shall not exceed 10.60 lbs/hr.

Compliance with these limits in conjunction with the potential to emit from the rest of the modification, will ensure that the emissions increase from this modification is less than twenty-five (25) tons of PM per year, fifteen (15) tons of PM₁₀ per year, one hundred (100) tons of CO per year, and therefore will render the requirements of 326 IAC 2-2 (PSD) not applicable.

Compliance with these limits will ensure the net emissions increase from Significant Source Modification No. 029-35496-00005 is less than ten (10) tons of direct PM_{2.5} per year, and therefore, will render the requirements of 326 IAC 2-2 (PSD) not applicable.

This modification to an existing major Emission Offset stationary source is not major because the emissions increase of NO_x and VOC are less than the Emission Offset significant thresholds. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply

Since this source is considered a major Emission Offset source and the unrestricted potential to emit of this modification is greater than forty (40) tons of VOC per year, this source has elected to limit the potential to emit of this modification as follows:

- (a) The VOC emissions from the DDG Dryer Operation (EU-39) shall not exceed 8.90 lbs/hr.

Compliance with this limit in conjunction with the potential to emit from the rest of the modification, will ensure that the potential to emit from this modification is less than forty (40) tons of VOC per year, and therefore will render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

NSPS:

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed DDG Dryer Operation (EU-39).

NESHAP:

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed DDG Dryer Operation (EU-39).

CAM:

- (d) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
- (1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis for the DDG Dryer (EU-39)							
Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
PM	cyclone	326 IAC 6.5	>100	<100	100	Y	N
PM10	cyclone	326 IAC 2-2	>100	<100	100	Y	N

CAM Applicability Analysis for the DDG Dryer (EU-39)							
Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
PM2.5	cyclone	326 IAC 2-2	>100	<100	100	Y	N
SO2	none	NA	NA	NA	NA	N	NA
NOx	none	NA	NA	NA	NA	N	NA
VOC	RTO	326 IAC 8-1-6	>100	<100	100	Y	N
CO	RTO	326 IAC 2-2	>100	<100	100	Y	N
Acetaldehyde	RTO	326 IAC 2-4.1	>10	<10	10	Y	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the DDG dryer (EU-39) for PM, PM10, PM2.5, VOC, CO, and Acetaldehyde upon issuance of the Title V Renewal. A CAM plan must be submitted as part of the Renewal application.

CAM Applicability Analysis for the Rotary Dryers and Transport System (EU-32)							
Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
Rotary Dryers - PM10	Wet Scrubber	326 IAC 2-2	>100	<100	100	Y	N
Rotary Dryers - PM2.5	Wet Scrubber	326 IAC 2-2	>100	<100	100	Y	N
Transport System - PM10	Cyclone	326 IAC 2-2	<100	NA	100	N	N
Transport System - PM2.5	Cyclone	326 IAC 2-2	<100	NA	100	N	N

Note - These are existing/modified units that have new limits as part of this modification. Only the new limits were evaluated for CAM.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the Rotary Dryers (EU-32) for PM10 and PM2.5 upon issuance of the Title V Renewal. A CAM plan must be submitted as part of the Renewal application.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 and 2-3 (PSD and Emission Offset)

PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The source has chosen to take the following emission limitation to limit the operation of the DDG Dryer (EU-39) so that it will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs.

- (a) The Acetaldehyde emissions from the DDG Dryer Operation (EU-39) shall not exceed 1.91 lbs/hr.

- (b) The Formaldehyde emissions from the DDG Dryer Operation (EU-39) shall not exceed 1.48 lbs/hr.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than ten (10) tons of single HAP per year, less than twenty-five (25) tons of total HAP per year, and therefore will render the requirements of 326 IAC 2-4.1 does not apply.

326 IAC 6.5 (PM Limitations Except Lake County)

This source is subject to 326 IAC 6.5 because it is located in Dearborn County, its PM PTE (or limited PM PTE) is equal to or greater than 100 tons/year or actual emissions are greater than 10 tons/year. However, this source is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. Therefore, 326 IAC 6.5-1-2(a) applies.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(c)(3), since the DDG Dryer Operation (EU-39) and the transport system (EU-32) are subject to a more stringent limitation under 326 IAC 6.5, the requirements of 326 IAC 6-3-2 do not apply..

326 IAC 7 (Sulfur Dioxide Rules)

The potential to emit of SO₂ from the DDG Dryer Operation is less than 25 tons per year and 10 pounds per hour. Therefore, the requirements of 326 IAC 7-1.1 do not apply.

326 IAC 8-1-6 (BACT)

In order to comply with the requirements of 326 IAC 8-1-6 (BACT), the source shall comply with the following:

- (a) The VOC emissions from the DDG dryer (EU-39) shall be controlled by an RTO.
- (b) The RTO shall operate with an overall control efficiency, which includes capture and destruction efficiencies, of not less than 98%.
- (c) The VOC emissions from the DDG dryer (EU-39) shall not exceed 1.91 lb/hr.

The detailed BACT analysis is included as Appendix C to this Technical Support Document.

326 IAC 9 (Carbon Monoxide Emission Rules)

The DDG Dryer Operation is commencing operation after March 21, 1972, however, it is not subject to an emission limit established under 326 IAC 9-1-2. Therefore, it is not subject to the requirements of 326 IAC 9-1-2.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The Compliance Determination Requirements applicable to this modification are as follows:

- (a) EU-32 and EU-39 have applicable compliance determination conditions as specified below:
- (1) Particulate, VOC, CO, and HAP Control
- (A) The RTO for VOC, CO, and HAP control shall be in operation and control emissions from the DDG Dryer EU-39 at all times the facility is in operation.
- (B) The wet scrubbers and cyclones for particulate control shall be in operation and control emissions from the Rotary Dryers and DDG Cooler and Transport System collectively identified as EU-32 and the DDG Dryer EU-39 at all times the facilities are in operation.
- (2) Testing

Summary of Testing Requirements					
Emission Unit	Control Device	Timeframe for Testing	Pollutant	Frequency of Testing	Limit or Requirement
EU-39	Cyclone & RTO	180 days	PM, PM10, PM2.5, CO, and VOC	Once every 5 years	98% overall VOC control, 1.91 lb/hr VOC, 1.91 lb/hr PM/PM10/PM2.5, 10.60 lb/hr CO
EU-32 (Transport System)	Cyclone	180 days	PM, PM10, PM2.5	Once every 5 years	1.05 lb/hr PM, 0.69 lb/hr PM10, 0.31 lb/hr PM2.5 (combined)

The compliance monitoring requirements applicable to this modification are as follows:

- (b) EU-32 and EU-39 have applicable compliance monitoring conditions as specified below:

Control	Parameter	Frequency	Range	Excursions and Exceedances
Transport System (EU-32) Cyclone & Cyclone (CE-39a)	Visible Emissions	Daily	Normal-Abnormal	Response Steps
Rotary Dryer (EU-32) Wet Scrubbers #1 and #2	Water Pressure Drop	Daily	0.5 to 6.5 inches	Response Steps
	Flow Rate		at or above 4 gpm at nozzle and 10 gpm at trays	
Rotary Dryer (EU-32) Wet Scrubbers #3 - #5	Water Pressure Drop	Daily	0.5 to 6.5 inches	Response Steps
	Flow Rate		at or above 3 gpm at nozzle and 7 gpm at trays	
RTO (CE-39b)	Temperature	Continuous	at or above 1400°F	Response Steps

Control	Parameter	Frequency	Range	Excursions and Exceedances
	Duct Pressure / Fan Amperage	Daily	latest stack test	

These monitoring conditions are necessary because the cyclones, wet scrubbers, and RTO must operate properly to ensure compliance with 326 IAC 6.5 (Particulate Matter Limitations Except Lake County), 326 IAC 8-1-6 (BACT), 326 IAC 2-2 (PSD), 326 IAC 2-4.1 (HAPs), and 326 IAC 2-7 (Part 70)).

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T029-32119-00005. These changes may include Title I changes (ex changes that add or modify synthetic minor emission limits). Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Summary of Model Updates Throughout the Permit

- (a) On November 3, 2011, the Indiana Air Pollution Control Board issued a revision to 326 IAC 2. The revision resulted in a change to the rule citations of the "responsible official", "trivial activity", "section 502(b)(10) changes", and "regulated pollutant, which is used only for purposes of section 19 of this rule" definitions.
- (b) Effective July 20, 2012 Dearborn County Lawrenceburg Township was designated non-attainment for the ozone standard. Conditions A.1 and C.18 have been updated.

Summary of Updates Specific to this Modification for Section A

- (a) Condition A.2 and Section D.1 Facility Description Box was updated to reflect the new and modified units and update descriptive information to existing units.

The permit has been revised as follows:

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary distilled spirits production source.

Source Address:	7 Ridge Avenue, Lawrenceburg, Indiana 47025
General Source Phone Number:	812-496-0013
SIC Code:	2085
County Location:	Dearborn
Source Location Status:	Nonattainment under the 8-hour ozone standard
	Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program
	Major Source, under PSD and Emission Offset Rules
	Major Source, Section 112 of the Clean Air Act
	Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

This stationary source consists of the following emission units and pollution control devices:

- (n) Five (5) rotary dryers, one (1) cooler and one (1) transport system, collectively identified as EU-32, installed prior to 1950, consisting of the following:

- (1) Two (2) rotary dryers, exhausting to Stacks S-305 and S-306, each equipped with a wet scrubber, capacity: 25,500 pounds of grain per hour **inlet**, each,
- (2) Three (3) rotary dryers, exhausting to Stacks S-307 through S-309, each controlled by a wet scrubber, capacity: 14,500 pounds of grain per hour **inlet**, each; and
- (3) One (1) cooler ~~and~~, **with a maximum throughput of 9.56 tons of DDG per hour, with emissions uncontrolled.**
- (4) ~~O~~ne (1) transport system, **with a maximum throughput of 9.56 tons of DDG per hour, approved for modification in 2015**, controlled by a cyclone, exhausting to Stack S- 310, ~~capacity: 13,000 pounds of grain per hour. and consisting of the following:~~
 - (A) One (1) hammermill.
 - (B) Four (4) screw conveyors.
 - (C) Two (2) drag conveyors.
 - (D) Three (3) product conveyors.
 - (E) One (1) K-valve.

- (q) One (1) DDG dryer operation, approved in 2015 for construction, identified as EU-39, with emission controlled by four (4) cyclones (CE-39a) and an 8 MMBtu/hr RTO (CE-39b), exhausting to stack S-320, and consisting of the following:
 - (1) One (1) DDG Dryer, with a maximum heat input of 45 MMBtu/hr and a maximum throughput of 9.56 tons/hr DDG.
 - (2) One (1) screw K-valve, identified as Screw #1 K-Valve.
 - (3) Three (3) enclosed feed conveyors, identified as #11 - #13.
 - (4) One (1) agitator mixer and inlet screw.
- (r) One (1) wet cake storage pad, approved in 2015 for construction, identified as EU-40, with a maximum throughput of 24.56 tons per hour wet cake, with emissions uncontrolled.

Summary of Model Updates for B and C Conditions

- (a) New Condition C.1 was added to include the requirements for units subject to 326 IAC 6-3-2 with a process weight rate less than 100 pounds per hour.
- (b) **Section C - General Reporting Requirements**
IDEM, OAQ has decided to clarify the Permittee's responsibility under CAM.

The permit has been revised as follows:

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(4042). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.1718 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11][326 IAC 2-2][326 IAC 2-3][40 CFR 64][326 IAC 3-8]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

- (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;**
- (2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and**
- (3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.**

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

Summary of Updates Specific to this Modification for Section D

- (a) Limits were added in new Conditions D.1.1, D.1.2, and D.1.3 to include the requirements for 326 IAC 8-1-6 (BACT) and to keep this modification minor under 326 IAC 2-2 (PSD) and 326 IAC 2-4.1 (HAPs). Associated compliance determination, monitoring, record keeping, reporting, and report forms were added.
- (b) Condition D.1.5 was revised to remove the transport system that is now subject to 326 IAC 6.5 and to break out the rotary dryers and cooler into separate limits as they now have separate calculations.
- (c) The requirements of 326 IAC 6.5 were added for the new units in new Condition D.1.6.
- (d) IDEM, OAQ has decided it is unnecessary to include multiple parametric monitoring conditions for EU-12, and EU-34 through EU-36. Therefore, Conditions D.1.6 and D.1.7 have been removed.

The permit has been revised as follows:

SECTION D.1

FACILITY OPERATION CONDITIONS

Emission Unit Description: Grain Handling, Fermentation, and Distillation

- (n) Five (5) rotary dryers, one (1) cooler and one (1) transport system, collectively identified as EU-32, installed prior to 1950, consisting of the following:
 - (1) Two (2) rotary dryers, exhausting to Stacks S-305 and S-306, each equipped with a wet scrubber, capacity: 25,500 pounds of grain per hour **inlet**, each,
 - (2) Three (3) rotary dryers, exhausting to Stacks S-307 through S-309, each controlled by a wet scrubber, capacity: 14,500 pounds of grain per hour **inlet**, each; and
 - (3) One (1) cooler and, **with a maximum throughput of 9.56 tons of DDG per hour, with emissions uncontrolled.**
 - (4) **O**ne (1) transport system, **with a maximum throughput of 9.56 tons of DDG per hour, approved for modification in 2015**, controlled by a cyclone, exhausting to Stack S- 310, ~~capacity: 13,000 pounds of grain per hour. and consisting of the following:~~
 - (A) **One (1) hammermill.**
 - (B) **Four (4) screw conveyors.**
 - (C) **Two (2) drag conveyors.**
 - (D) **Three (3) product conveyors.**
 - (E) **One (1) K-valve.**

- (q) **One (1) DDG dryer operation, approved in 2015 for construction, identified as EU-39, with emission controlled by four (4) cyclones (CE-39a) and an 8 MMBtu/hr RTO (CE-39b), exhausting to stack S-320, and consisting of the following:**

- (1) One (1) DDG Dryer, with a maximum heat input of 45 MMBtu/hr and a maximum throughput of 9.56 tons/hr DDG.
- (2) One (1) screw K-valve, identified as Screw #1 K-Valve.
- (3) Three (3) enclosed feed conveyors, identified as #11 - #13.
- (4) One (1) agitator mixer and inlet screw.
- (r) One (1) wet cake storage pad, approved in 2015 for construction, identified as EU-40, with a maximum throughput of 24.56 tons per hour wet cake, with emissions uncontrolled.

D.1.1 Volatile Organic Compounds (VOC) BACT Limits [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the Permittee shall comply with the following Best Available Control Technology (BACT) requirements:

- (a) The VOC emissions from the DDG dryer (EU-39) shall be controlled by an RTO.
- (b) The RTO shall operate with an overall control efficiency, which includes capture and destruction efficiencies, of not less than 98%.
- (c) The VOC emissions from the DDG dryer (EU-39) shall not exceed 1.91 lb/hr.

D.1.2 PSD Minor Limit [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the Permittee shall comply with the following:

- (a) The total dryer feed rate for the Rotary Dryers (EU-32) shall not exceed 147,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The PM_{2.5} emissions from the Rotary Dryers (EU-32) shall not exceed 0.27 lb/ton.
- (c) The PM emissions from the Transport System (EU-32) shall not exceed 1.22 lbs/hr.
- (d) The PM₁₀ emissions from the Transport System (EU-32) shall not exceed 0.82 lbs/hr.
- (e) The PM_{2.5} emissions from the Transport System (EU-32) shall not exceed 0.40 lbs/hr.
- (f) The PM emissions from the DDG Dryer Operation (EU-39) shall not exceed 1.91 lbs/hr.
- (g) The PM₁₀ emissions from the DDG Dryer Operation (EU-39) shall not exceed 1.91 lbs/hr.
- (h) The PM_{2.5} emissions from the DDG Dryer Operation (EU-39) shall not exceed 1.91 lbs/hr.
- (i) The CO emissions from the DDG Dryer Operation (EU-39) shall not exceed 10.60 lbs/hr.

Compliance with these limits in conjunction with the potential to emit from the rest of the modification, will ensure that the emission increase from this modification is less than

twenty-five (25) tons of PM per year, fifteen (15) tons of PM₁₀ per year, one hundred (100) tons of CO per year, and therefore will render the requirements of 326 IAC 2-2 (PSD) not applicable.

Compliance with these limits will ensure the net emissions increase from Significant Source Modification No. 029-35496-00005 is less than ten (10) tons of direct PM_{2.5} per year, and therefore, will render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.1.3 Emission Offset Minor Limit [326 IAC 2-3]

In order to render the requirements of 326 IAC 2-3 (Emission Offset) not applicable, the Permittee shall comply with the following:

The VOC emissions from the DDG Dryer Operation (EU-39) shall not exceed 8.90 lbs/hr.

Compliance with this limit, in conjunction with the potential to emit from the rest of the modification, will ensure that the potential to emit from this modification is less than forty (40) tons of VOC per year, and therefore will render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

D.1.4 HAP Minor Limit [326 IAC 2-4.1]

In order to render the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) not applicable, the Permittee shall comply with the following:

- (a) The Acetaldehyde emissions from the DDG Dryer Operation (EU-39) shall not exceed 1.91 lbs/hr.**
- (b) The Formaldehyde emissions from the DDG Dryer Operation (EU-39) shall not exceed 1.48 lbs/hr.**

Compliance with these emission limits, in conjunction with the potential to emit from the rest of the modification, will ensure that the potential to emit from Significant Source Modification No. 029-35496-00005 is less than ten (10) tons of single HAP per year and twenty-five (25) tons of total HAPs per year, and therefore will render the requirements of 326 IAC 2-4.1 not applicable.

D.1.5 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the following emission units and control devices shall not exceed the pounds per hour limitation when operating at the stated process weight rates calculated using the following equations:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Emission Unit (baghouse)	Unit Description	Process weight rate (tons per hour)	Allowable particulate emission rate (pounds per hour)
EU-11	grain receiving and Pneumatic Conveyor	28.0	38.2
EU-12	Corn receiving and storage system	446	67.6
EU-13	Grain Storage Bins	224	59.7
EU-14	Hammermills and hopper	54.9	45.4
EU-32	Rotary dryers, cooler and transport system	53.8-25.5	45.3-35.9
EU-32	cooler	9.56	18.6
EU-34	Storage silos and surge hoppers	21.0	31.5
EU-35	Air transport system and scale to rail car loading area	7.00	15.1
EU-36	Air transport system and scale to the truck loading area	7.00	15.1
EU-37	Rail Loading	7.00	15.1
EU-38	Truck Loading	7.00	15.1

D.1.7 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2 (a)(Particulate Matter Limitations Except Lake County), particulate matter (PM) emissions from the Transport System (EU-32), DDG Dryer (EU-39), and the wet cake storage pad (EU-40) shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.1.49 Particulate, VOC, CO, VOC, and HAP Control [326 IAC 2-7-6(6)]

- (a) In order to ensure compliance with Conditions D.1.1, D.1.2, D.1.3, and D.1.4 the RTO for VOC, CO, VOC and HAP control shall be in operation and control emissions from the DDG Dryer EU-39 at all times the facility is in operation.
- (b) In order to ensure compliance with Conditions D.1.2 and D.1.7, the wet scrubbers and cyclones for particulate control shall be in operation and control emissions from the Rotary Dryers and Transport System collectively identified as EU-32 and the DDG Dryer EU-39 at all times the facilities are in operation.
- (ac) In order to ensure compliance with Conditions ~~D.1.1~~ **D.1.5 and D.1.6**, the baghouses for particulate control shall be in operation and control emissions from EU-12 and EU-34 through EU-36, at all times that the facilities are in operation.
- (b) ~~For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).~~
- (c) ~~For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the~~

~~event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).~~

~~Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, or dust traces.~~

D.1.10 Testing Requirements [326 IAC 2-1.1-11]

- (a) **Not later than 180 days after the startup of DDG Dryer EU-39, the Permittee shall perform PM, PM10, PM2.5, CO, and VOC testing of the DDG Dryer EU-39 utilizing methods approved by the commissioner at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.**
- (b) **Not later than 180 days after the startup of DDG Dryer EU-39, the Permittee shall perform PM, PM10, and PM2.5 testing of the Transport System EU-32 utilizing methods approved by the commissioner at least once every 5 years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition. PM10 and PM2.5 includes filterable and condensable PM.**

D.1.6 Parametric Monitoring [40 CFR 64]

~~The Permittee shall record the pressure drop across the baghouses used in conjunction with EU-12, at least once per day when this process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response. The normal range for this unit is a pressure drop between 0.5 and 5.5 inches of water unless a different upper bound or lower bound value for this range is determined during the latest stack test. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.~~

~~The instrument used for determining the pressure drop shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once annually or as established by the manufacturer's specifications whichever is more frequent.~~

D.1.7 Baghouse Parametric Monitoring

~~The Permittee shall record the pressure drop across the baghouses used in conjunction with EU-34 through EU-36, at least once per day when this process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take reasonable response. The normal range for these units is a pressure drop between 0.5 and 5.5 inches of water unless a different upper bound or lower bound value for this range is determined during the latest stack test. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.~~

~~The instrument used for determining the pressure drop shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated~~

~~at least once annually or as established by the manufacturer's specifications whichever is more frequent.~~

D.1.12 Visible Emissions Notations

- (a) Visible emission notations of the Transport System cyclone stack exhausts (S-310) and the cyclones (CE-39a) stack exhausts (S-320) shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.13 Scrubber Flow Rate

- (a) The Permittee shall monitor and record the flow rate of the scrubbers controlling the Rotary Dryers (EU-32) at least once per day when the associated processes are in operation. The Permittee shall maintain the flow rate at or above the minimum specified in the table below.

Parameter	Scrubber #1 S-305	Scrubber #2 S-306	Scrubber #3 S-307	Scrubber #4 S-308	Scrubber #5 S-309
Minimum flow rate measured at nozzles (gal/min)	4.0	4.0	3.0	3.0	3.0
Minimum flow rate measured at trays (gal/min)	10.0	10.0	7.0	7.0	7.0

- (b) When for any one reading, the flow rate is below the above mentioned minimum, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A reading that is below the above mentioned minimum flow rate is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.14 Parametric Monitoring - Wet Scrubbers

The Permittee shall monitor and record the pressure drop across the scrubbers controlling the Rotary Dryers (EU-32) at least once per day when the associated processes are in operation. When for any one reading, the pressure drop across a scrubber is outside the normal range, the Permittee shall take a reasonable response. The normal

range for this unit is a pressure drop between 0.5 and 6.5 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A pressure drop reading that is outside the above mentioned range(s) is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instruments used for determining the pressure drop shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.1.15 RTO Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the RTO (CE-39b) for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as 3-hour average. From the date of startup until the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature of 1,400°F.
- (b) The Permittee shall determine the 3-hour average temperature from the latest valid stack test that demonstrates compliance with limits in Conditions D.1.1, D.1.2, D.1.3, and D.1.4.
- (c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature as observed during the latest compliant stack test.
- (d) If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A 3-hour average temperature reading below the above mentioned 3-hour average temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.16 Parametric Monitoring - RTO

- (a) The Permittee shall determine the appropriate duct pressure or fan amperage from the latest valid stack test that demonstrates compliance with limits in Conditions D.1.1, D.1.2, D.1.3, and D.1.4.
- (b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in latest compliant stack test.
- (c) When, for any one reading, the duct pressure or fan amperage is outside the above mentioned range, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (d) The instruments used for determining the pressure drop shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.1.8 ~~Broken or Failed Bag Detection – Multi-Compartment Baghouse~~

~~In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

D.1.17 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

D.1.18 Cyclone Failure Detection

In the event that a cyclone malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emission unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.19 Scrubber Failure Detection

In the event that a scrubber malfunction has been observed:

- (a) For a scrubber controlling emissions from a process operated continuously, a failed unit and the associated process will be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For a scrubber controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the

processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.1.920 Record Keeping Requirements

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- (a) **To Document the compliance status with Condition D.1.2(a), the Permittee shall maintain a monthly record of the total dryer feed rate for the Rotary Dryers (EU-32).**
- (ab) To document the compliance status with Conditions ~~D.1.5~~ **D.1.11 and D.1.12**, the Permittee shall maintain a daily record of visible emission notations of the ~~corn receiving and storage~~ **baghouse and cyclone** stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the ~~corn receiving and storage~~ **process** did not operate that day).
- (b) ~~To document the compliance status with Condition D.1.6 and D.1.7, the Permittee shall maintain a daily record of the pressure drop across the baghouses controlling the corn receiving and storage and DDGS loadout facilities. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the DDGS loadout facilities~~ **process** ~~did not operate that day).~~
- (c) **To document the compliance status with Conditions D.1.13 and D.1.14, the Permittee shall maintain daily records of the Flow Rate and Pressure Drop for the scrubber. The Permittee shall include in its daily record when the readings are not taken and the reason for the lack of the readings (e.g., the process did not operate that day).**
- (d) **To document the compliance status with Condition D.1.15, the Permittee shall maintain continuous temperature records for the RTO (CE-39b) and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.**
- (e) **To document the compliance status with Condition D.1.16, the Permittee shall maintain daily records of the duct pressure or fan amperage for the RTO (CE-39b). The Permittee shall include in its daily record when the readings are not taken and the reason for the lack of the readings (e.g. the process did not operate that day).**
- (ef) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.1.21 Reporting Requirements

A quarterly summary of the information to document the compliance status with D.1.2(a) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1 (35).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

Part 70 Quarterly Report

Source Name: MGPI of Indiana
Source Address: 7 Ridge Avenue, Lawrenceburg, Indiana 47025
Part 70 Permit No.: T029-32119-00005
Facility: Five (5) Rotary Dryers (EU-32)
Parameter: total dryer feed rate
Limit: shall not exceed 147,000 tons per twelve (12) consecutive month period
with compliance determined at the end of each month.

QUARTER :

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Summary of Model Updates for E Conditions

(a) IDEM, OAQ has revised the NSPS and NESHAP conditions for clarification purposes.

The permit has been revised as follows:

SECTION E.1 NSPS - 40 CFR Part 60, Subpart Dc

E.1.1 General Provisions Relating to New Source Performance Standards[326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-4 for the ~~one steam boiler, identified as EU-97~~ **emission unit(s) listed above**, except as otherwise specified in 40 CFR Part 60, Subpart Dc.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

E.1.2 Small Industrial-Commercial-Institutional Steam Generating Units NSPS [40 CFR Part 60, Subpart Dc][326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee ~~which operates an industrial steam generating unit~~ shall comply with the provisions of 40 CFR Part 60, Subpart Dc, which are incorporated by reference as 326 IAC 12 (included as Attachment A of this permit) for ~~EU-97~~ **the emission unit(s) listed above** as specified as follows:

SECTION E.2 NESHAP - 40 CFR Part 63, Subpart ZZZZ

E.2.1 General Provisions Relating to National Emissions Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.6580, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, for the ~~reciprocating internal combustion engines~~ **emission unit(s) listed above** as specified in 40 CFR Part 63, Subpart ZZZZ in accordance with the schedule in 40 CFR 63, Subpart ZZZZ.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.2.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [40 CFR Part 63, Subpart ZZZZ][326 IAC 20-82]

Pursuant to 40 CFR Part 63, Subpart ZZZZ, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment B to this permit) which are incorporated by reference as 326 IAC 20-82, for the reciprocating internal combustion engines **emission unit(s) listed above**, as specified as follows:

SECTION E.3 NESHAP - 40 CFR Part 63, Subpart DDDDD

**National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements
[326 IAC 2-7-5(1)][326 IAC 2-8-4 (1)][326 IAC 2-6-1-5 (a)]**

E.3.1 General Provision Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.7565, the Permittee shall comply with the provisions of 40 CFR Part 63 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1 for the natural gas fired boilers identified as EU-96 and EU-97 **emission unit(s) listed above, as specified in 40 CFR Part** except as otherwise specified in 40 CFR 63, Subpart DDDDD, in accordance with the schedule in 40 CFR Part 63, Subpart DDDDD.

E.3.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters [326 IAC 20-95][40 CFR 63 Subpart DDDDD]

Pursuant to 40 CFR 63 Subpart DDDDD, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart DDDDD, which are incorporated by reference at 326 IAC 20-95 (included as Attachment C of this permit) for the natural gas fired boilers identified as EU-96 and EU-97 **emission unit(s) listed above**, as specified as follows:

Conclusion and Recommendation

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 029-35496-00005 and Significant Permit Modification No. 029-35318-00005. The staff recommend to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Kristen Willoughby at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-3031 or toll free at 1-800-451-6027 extension 3-3031.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.